**TECHNICAL BULLETIN No. 67.05** 



# HIGH MODULUS ONE-COMPONENT SELF-LEVELLING POLYURETHANE SEALANT



## DESCRIPTION

**MAXFLEX®** 800 is a high modulus, onecomponent, self-levelling, polyurethane-based elastomeric sealant. It is especially recommended for sealing horizontal joints with very good resistance to abrasion. Its fluid consistency allows a quick and easy placing, simply by pouring into the joint.

## **APPLICATION FIELDS**

- Sealing of horizontal joints in industrial concrete floors subject to medium-heavy wheel traffic.
- Sealing of isolation joints and corners.
- Sealing of horizontal joints between different masonry units.

## ADVANTAGES

- Very good fluidity and self-levelling properties, placement simply by pouring.
- No shrinkage.

- Very good resistance to abrasion.
- Quick curing time.
- High resistance to UV rays and weathering.
- Very good chemical resistance to hydrocarbons, greases, diluted acids and alkalis.

## **APPLICATION INSTRUCTIONS**

#### Surface preparation

Joint edges must be structurally sound, clean, completely dry and free of dust, coatings, efflorescences, oil, grease, gypsum or any foreign material that could affect to adhesion. If necessary, clean surface by grinding, sandblasting, wire brushing, air compressed and use solvents or tensioactive agents for removing greases and oils.

In order to improve adhesion, specially on porous concrete surfaces, apply by brush a primer coat of *PRIMER® 1* with a recommended consumption between 0,13-0,17 l/m<sup>2</sup> (Technical Bulletin N.: 68). Apply the sealant once *PRIMER® 1* has released the solvent but is still tacky, i.e. from 30 to 120



minute depending on temperature and humidity. After this time or if **PRIMER® 1** gets dry, apply a new primer coat.

To prevent staining the joint edges and provide a better finish, use a masking tape on joint edges before application.

Some concrete compounds or surface moisture may react with **MAXFLEX® 800** producing bubbles on surface. Testing on questionable substrates should be done to determine compatibility with sealant and if priming is needed.

#### Joint design

**MAXFLEX® 800** can be used for joints wherein the minimum and maximum width is between 8 mm and 30 mm respectively. Joint depth must be the half of joint width, with the exception of joint width under 15 mm, where the depth and width must be equal. Joint width should be at least four times than the maximum movement expected.

Use a closed cell polyethylene backer rod such as **MAXCEL**<sup>®</sup> (Technical Bulletin No. 48) with a diameter 25% larger than joint diameter, in order to control joint depth and to prevent bond on bottom. Do not wet **MAXCEL**<sup>®</sup> with **PRIMER**<sup>®</sup> **1**.

#### Application

**MAXFLEX® 800** is supplied ready to use. Pour directly or extrude by gun the sealant inside the joint and level it to form a clean joint bead. Remove the masking tape before curing process starts.

#### **Application conditions**

Do not apply when rain, contact with water, condensation, dampness or dew is expected within the first 24 h.

Optimum application temperature is from 10°C to 30°C. Do not apply with substrate and/or ambient temperature at or below 5°C, or when such temperature is expected to fall below 5°C within the first 24 h. Do not apply to frozen or frost-covered surfaces.

The relative humidity should be less than 90% and surface/air temperature must be at least 3°C higher than dew point during the application and curing. Avoid applications with extreme temperatures, windy conditions and/or direct exposure to sunlight.

#### Curing

Check the curing speed at 23°C and 50% R.H in the table Technical Data before opening to service. Lower temperature and/or higher relative humidity will require longer curing times.

#### Cleaning

Tools and equipments can be cleaned with **MAXSOLVENT®** immediately after use. Once the product hardens, it can only be removed by mechanical methods.

#### CONSUMPTION

The estimated consumption of **MAXFLEX® 800** depends on joint size and can be calculated from:

Consumption (ml of sealant/lineal meter) = Joint width (mm) \* Joint depth (mm)

For a 10 x 10 mm joint, the estimated consumption is about 100 ml per 1 lineal meter of joint.

The estimated consumption for a 600 ml bag of **MAXFLEX® 800** can be estimated from:

Consumption (lineal meters of joint per 600 ml bag) = 600 \* (1/ Joint width (mm)) \* (1/Depth of the sealant (mm))

This estimated consumption may vary depending on roughness, porosity, surface conditions and application method. A preliminary test on-site will determine the coverage exactly.

## **IMPORTANT INDICATIONS**

- Do not add solvents, admixtures or other nonspecified compounds to **MAXFLEX® 800.**
- Use **DRIZORO** primers recommended and allow the proper curing time between them.
- Provide the width / depth joint design recommended.
- Avoid trapping air in joint during application.
- For joints wider than 3 cm, use MAXFLEX<sup>®</sup> 700, MAXFLEX<sup>®</sup> 900 or the elastic strip MAXFLEX<sup>®</sup> XJS.
- Joint movement capability expected must not be higher than 20%.
- If a finish coating is required, allow the full curing of the sealant and use an elastic coating to withstand joint movements.
- For further information other uses not specified in this Technical Bulletin, consult our Technical Department.

## PACKAGING

**MAXFLEX® 800** is supplied in 600 ml bag. It is available in grey colour.



### STORAGE

Nine months in its original unopened packaging, kept in a dry and covered place, protected from frost, moisture and direct sunlight, with temperatures above 5°C.

#### SAFETY AND HEALTH

**MAXFLEX®** 800 contains polyisocynates so eye and skin contact should be avoided. Use rubber gloves and safety goggles for application. In case of skin contact, wash the affected area with abundant water and soap. In case of eye contact, rinse immediately with clean water without rubbing. If irritation persists, seek medical assistance.

Consult the Safety Data Sheet of *MAXFLEX*<sup>®</sup> 800.

Disposal of the product and its packaging must be carried out according to the current official regulations and it is responsibility of the final user of the product.

## **TECHNICAL DATA**

Characteristics of the product	
Appearance and colour	One-component grey fluid paste
Density, (g/cm <sup>3</sup> )	1,25 ± 0,10
Application and curing conditions	
Maximum joint width, (mm)	30
Width:depth joint design	2:1
Substrate and ambient minimum application temperature, (°C)	>5
Skin over time at 23 °C and 50% R.H., (minutes)	60
Curing speed at 23 °C and 50% R.H., (mm / 24 h)	2
Characteristics for the cured product	
Shore A hardness, ISO 868	80
Elasticity modulus at 100 %, ISO 37 (MPa)	0,4
Elongation at break, ISO 37 (%)	250
Chemical resistance	Very good against water, cleaning agents, oils, grease, hydrocarbons and diluted acid and bases
Service temperature range, (°C)	From –30 to +90

## GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO**<sup>®</sup>, **S.A.U.** reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product. The data shown on consumptions, measurement and yields are for guidance only and based on our experience. These data are subject to variation due to the specific atmospheric and jobsite conditions so reasonable variations from the data may be experienced. In order to know the real data, a test on the jobsite must be done, and it will be carried out under the client responsibility. We shall not accept responsibility exceeding the value of the purchased product. For any other doubt, consult our Technical Department. This version of bulletin replaces the previous one.



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